## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Currently amended) A method of communicating broadcast information comprising the steps of:
- a) causing a server to communicate a first stream representing digital broadcast information to a first user device wherein said server and said first user device are coupled to the Internet;
- b) causing said server to communicate a second stream representing said broadcast information to a second user device wherein said second user device is coupled to the Internet;
- c) causing said first user device to communicate a third stream representing said broadcast information to a third user device wherein said third user device is coupled to the Internet;
- d) receiving and rendering, concurrently, said broadcast information on said first, second and third user devices, wherein said user devices form one or more communication chains, wherein each communication chain has one or more tiers, and wherein a sum of user devices in corresponding tiers of said communication chains is variable; and
- e) for each user device, registering with and periodically sending status update messages to a transmission scheduler that is separate from said server and said user devices, wherein said transmission scheduler actively monitors, manages, and initiates <u>failure-based</u> and <u>performance-based</u> changes in said communication chains among said server and said user devices.

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- 2. (Original) A method as described in Claim 1 wherein said broadcast information is a radio program.
- 3. (Original) A method as described in Claim 1 wherein said broadcast information is a television program.
- 4. (Original) A method as described in Claim 1 wherein said broadcast information is a computer program.
- 5. (Previously Presented) A method as described in Claim 1 further comprising the step of f) in response to said first user device shutting down, causing said second user device to communicate a fourth stream representing said broadcast information to said third user device.
- 6. (Original) A method as described in Claim 1 further comprising the steps of:

adding a fourth user device on said Internet; and causing said second user device to communicate a fourth stream representing said broadcast information to said fourth user device.

7. (Original) A method as described in Claim 1 further comprising the steps of:

adding a fourth user device on said Internet; and causing said server to communicate a fourth stream representing said broadcast information to said fourth user device.

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8. (Currently amended) A method of broadcasting information over a network of electronic devices, said method comprising the steps of:

transmitting broadcast information from a server to a first group of electronic devices of said network; and

achieving broadcasting of said broadcast information for said first group and a second group of electronic devices by forwarding said broadcast information from said first group of electronic devices to said second group of electronic devices of said network such that said first and second groups of electronic devices receive and render, concurrently, said broadcast information, wherein said electronic devices form one or more communication chains, wherein each communication chain has one or more tiers, and wherein a sum of electronic devices in corresponding tiers of said communication chains is variable; and

for each electronic device, registering with and periodically sending status update messages to a transmission scheduler that is separate from said server and said electronic devices, wherein said transmission scheduler actively monitors, manages, and initiates <u>failure-based</u> and <u>performance-based</u> changes in said communication chains among said server and said electronic devices.

9. (Previously presented) The method as recited in Claim 8 wherein said step of achieving broadcasting further comprises the steps of:

establishing direct communication links between respective ones of said first group of electronic devices and said second group of electronic devices; and

instructing said first group of electronic devices to transmit said broadcast information to said second group of electronic devices via said direct communication links.

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- 10. (Original) The method as recited in Claim 9 further comprising the step of periodically updating status of said first and second groups of electronic devices.
- 11. (Original) The method as recited in Claim 10 further comprising the step of by-passing inactive electronics devices of said first group by re-routing said direct communication links.
- 12. (Original) The method as recited in Claim 10 further comprising the step of terminating direct communications links that are associated with inactive electronic devices of said first and said second group.
- 13. (Original) The method as recited in Claim 8 wherein said first and second groups of electronic devices each comprises a computer system configured for receiving said broadcast information and for forwarding said broadcast information.
- 14. (Original) The method as recited in Claim 8 wherein said network of electronic devices comprises the Internet.
- 15. (Currently amended) A method of communicating broadcast information comprising the steps of:
- a) communicating a first digital stream to a first user device, said first digital stream representing broadcast information, said step a) performed by a server and wherein said server and said first user device are coupled to the Internet;
- b) communicating a second digital stream to a second user device, said second digital stream representing said broadcast information, said step b)

performed by said server and wherein said second user device is coupled to the Internet:

- c) communicating a third digital stream to a third user device, said third digital stream representing said broadcast information, said step c) performed by said first user device wherein said third user device is coupled to the Internet;
- d) receiving and rendering, concurrently, said broadcast information on said second and third user devices, wherein said user devices form one or more communication chains, wherein each communication chain has one or more tiers, and wherein a sum of user devices in corresponding tiers of said communication chains is variable; and
- e) for each user device, registering with and periodically sending status update messages to a transmission scheduler that is separate from said server and said user devices, wherein said transmission scheduler actively monitors, manages, and initiates <u>failure-based</u> and <u>performance-based</u> changes in said communication chains among said server and said user devices.
- 16. (Original) A method as described in Claim 15 wherein said broadcast information is an audio program.
- 17. (Original) A method as described in Claim 15 wherein said broadcast information is a visual program.
- 18. (Original) A method as described in Claim 15 wherein said broadcast information is a radio program.
- 19. (Original) A method as described in Claim 15 wherein said broadcast information is a computer program.

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- 20. (Previously Presented) A method as described in Claim 15 further comprising the step of f) in response to said first user device shutting down, causing said second user device to communicate a fourth digital stream representing said broadcast information to said third user device.
- 21. (Original) A method as described in Claim 15 further comprising the step of communicating a fourth digital stream representing said broadcast information to a fourth user device, said step of communicating a fourth digital stream performed by said second user device.
- 22. (Original) A method as described in Claim 15 further comprising the step of communicating a fourth digital stream representing said broadcast information to a fourth user device, said step of communicating a fourth digital stream performed by said first user device.
- 23. (Original) A method as described in Claim 15 further comprising the steps of:

communicating a fourth digital stream representing said broadcast information to a fourth user device, said step of communicating a fourth digital stream performed by said third user device; and

said fourth user device rendering said broadcast information thereon.

24. (Currently amended) A system for communicating broadcast information comprising:

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- a) a server configured to communicate a first digital stream to a first user device, said first digital stream representing broadcast information and wherein said server and said first user device are coupled to the Internet;
- b) said server also configured to communicate a second digital stream to a second user device, said second digital stream representing said broadcast information and wherein said second user device is coupled to the Internet;
- c) said first user device configured to communicate a third digital stream to a third user device, said third digital stream representing said broadcast information and wherein said third user device is coupled to the Internet;
- d) said second and said third user devices also for receiving and rendering, concurrently, said broadcast information, wherein said user devices form one or more communication chains, wherein each communication chain has one or more tiers, and wherein a sum of user devices in corresponding tiers of said communication chains is variable; and
- e) a transmission scheduler for actively monitoring, managing, and initiating failure-based and performance-based changes in said communication chains among said server and said user devices, and wherein each user device registers with and periodically sends status update messages to said transmission scheduler that is separate from said server and said user devices.
- 25. (Currently Amended) A system as described in Claim 24 wherein said transmission scheduler further coupled to the Internet and for scheduling and maintaining communication links between said <a href="maintaining-sever">sever</a>, said first user device, said second user device and said third user device.

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- 26. (Original) A system as described in Claim 25 wherein said first, second and third user devices register with said transmission scheduler before receiving said broadcast information.
- 27. (Original) A system as described in Claim 24 wherein said broadcast information is an audio program.
- 28. (Original) A system as described in Claim 24 wherein said broadcast information is a visual program.
- 29. (Original) A system as described in Claim 24 wherein said broadcast information is a radio program.
- 30. (Original) A system as described in Claim 24 wherein said broadcast information is a computer program.
- 31. (Original) A system as described in Claim 25 wherein said transmission scheduler, in response to said first user device shutting down, is for causing said second user device to communicate a fourth digital stream representing said broadcast information to said third user device.
- 32. (Original) A system as described in Claim 25 further comprising a fourth user device registering with said transmission scheduler and wherein said second user device is configured to communicate a fourth digital stream representing said broadcast information to said fourth user device.

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- 33. (Original) A system as described in Claim 25 further comprising a fourth user device registering with said transmission scheduler and wherein said first user device is configured to communicate a fourth digital stream representing said broadcast information to said fourth user device.
- 34. (Original) A system as described in Claim 25 further comprising a fourth user device registering with said transmission scheduler and wherein said third user device is configured to communicate a fourth digital stream representing said broadcast information to said fourth user device and wherein said fourth user device is for rendering said broadcast information thereon.
- 35. (Currently amended) A system for communicating broadcast information comprising:
- a) a server configured by a transmission scheduler to communicate a first digital stream to a first user device, said first digital stream representing broadcast information and wherein said server and said first user device are coupled to the Internet;
- b) said server also configured by said transmission scheduler to communicate a second digital stream to a second user device, said second digital stream representing said broadcast information and wherein said second user device is coupled to the Internet;
- c) said first user device configured by said transmission scheduler to communicate a third digital stream to a third user device, said third digital stream representing said broadcast information and wherein said third user device is coupled to the Internet; and
- d) wherein said second and said third user devices are also for receiving and rendering, concurrently, said broadcast information, and wherein said user CNCT-006.CPA/ACM/JSG Page 10 Examiner: BROWN, R.

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devices form one or more communication chains, wherein each communication chain has one or more tiers, and wherein a sum of user devices in corresponding tiers of said communication chains is variable; and

e) said transmission scheduler for actively monitoring, managing, and initiating failure-based and performance-based changes in said communication chains among said server and said user devices, and wherein each user device registers with and periodically sends status update messages to said transmission scheduler that is separate from said server and said user devices, and

wherein said transmission scheduler schedules and maintains communication links between said server, said first user device, said second user device and said third user device to transmit said broadcast information.

- 36. (Original) A system as described in Claim 35 wherein said first, second and third user devices register with said transmission scheduler before receiving said broadcast information.
- 37. (Original) A system as described in Claim 35 wherein said broadcast information is an audio program.
- 38. (Original) A system as described in Claim 35 wherein said broadcast information is a visual program.
- 39. (Original) A system as described in Claim 35 wherein said broadcast information is a radio program.
- 40. (Original) A system as described in Claim 35 wherein said broadcast information is a computer program.

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- 41. (Original) A system as described in Claim 35 wherein said transmission scheduler, in response to said first user device shutting down, is for causing said second user device to communicate a fourth digital stream representing said broadcast information to said third user device.
- 42. (Original) A system as described in Claim 36 further comprising a fourth user device registering with said transmission scheduler and wherein said second user device is configured by said transmission scheduler to communicate a fourth digital stream representing said broadcast information to said fourth user device.
- 43. (Original) A system as described in Claim 36 further comprising a fourth user device registering with said transmission scheduler and wherein said first user device is configured by said transmission scheduler to communicate a fourth digital stream representing said broadcast information to said fourth user device.
- 44. (Original) A system as described in Claim 36 further comprising a fourth user device registering with said transmission scheduler and wherein said third user device is configured by said transmission scheduler to communicate a fourth digital stream representing said broadcast information to said fourth user device and wherein said fourth user device is for rendering said broadcast information thereon.

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